

The Broadband Potential Score

The Broadband Potential Scores are new, continuous variables that are proportional (but not linearly) to a firm's overall bandwidth requirements (in Mbps). These scores indicate if a firm has significant data, voice and video communication demands that could benefit from utilizing T1, T3, Frame Relay or other high-end telecommunication services. They exist in the following two forms, and both are expressed as a continuous number between 0.0 and 9999.9:

- 1) The **"Site" Broadband Potential Score (SBBP)** – represents the relative bandwidth requirements only at a single location.
- 2) The **"Cumulative" Broadband Potential Score (CBBP)** – represents the relative bandwidth requirements at a given location *plus* the requirements of all other subservient locations that answer to this location (determined by the Dun & Bradstreet D-U-N-S linkages).

Designed as a next generation product to replace the "HI-CAP" models, they provide a much greater degree of differentiation of behavior between firms within a single HI-CAP "bucket". *By using these scores, one can infer the likely products and data services a client could choose to employ to address the firm's estimated bandwidth requirements, even though this model does not specifically predict the exact data service chosen.*

TNS Telecoms created the Broadband Potential Scores by using industry constructs defined by TNS' experienced telecommunications modelers, then validating these against actual information on the real presence of specific data services (proportional to bandwidth potential) from TNS' **BusinessWave™** national survey of businesses' telecommunications usage and behaviors. The "driver firmographics" of the models include:

- **Number of Subsidiary Organizations:** The number of locations associated with an ultimate "parent" firm, representing a measure of the intrafirm network potential.
- **Combined Distance from Headquarters:** The sum of the mileage between all the subsidiary locations that answer to an ultimate "parent" firm, representing a measure of the distance requirements associated with intra-firm communications.
- **Number of Employees:** Employment size is a proxy for overall size of the firm and the firm's communication's requirements, and provides an estimate of the potential number of intra-firm channels that could be required.
- **Telecommunications Intensity:** The intensity measure combines lines, toll usage and local usage, and provides weights for the Broadband Potential Scores.

The key benefits of the new Broadband Potential Scores over the earlier HI-CAP system include:

- The Broadband Potential Score provides a ***continuous indicator of bandwidth potential***, and not a discontinuous “class” measure, allowing for finer differentiation of the firm’s bandwidth requirements.
- These models are ***built from the “bottom-up”*** (at the firm level of detail), not from the “top-down”, meaning that every firm will have a Broadband Potential Score associated with them, irrespective of the type of legal entity the firm represents.
- These new models also show the ***Cumulative Total Broadband Potential*** at that location, including that of any subsidiaries or branches that answer directly to that location.
- The new Broadband Potential Score now provides some insights on what ***types of Data Services solutions*** that best fit a firm’s probable bandwidth requirements, including DSL, ISDN and Frame Relay (T1-enabled services), and WAN and ATM (T3-enabled services), and assign a relevant range indicator, shown below:

Likely Data Services by Broadband Potential (CBBP) Score Range

Likely Broadband Data Services	CBBP Score Range	Data Svcs. Range
None	>=0 and <2	A
xDSL (Digital Subscriber Line)	>=2 and <5	B
ISDN (PRI) (Primary Rate Interface Circuit)	>=5 and <50	C
T1	>=5 and <50	C
Frame Relay	>=5 and <50	C
WAN (Wide Area Network)	50 and higher	D
T3	50 and higher	D
ATM (Asynchronous Transfer Mode)	50 and higher	D

Likely Data Services by Data Services Range and Composition of the D&B file

Likely Services	CBBP Range	DS Range	D&B Firms*	% of D&B File*
None	>=0 and <2	A	8,504,534	67.99
xDSL	>=2 and <5	B	1,469,674	11.75
ISDN (PRI) T1 Frame Relay	>=5 and <50	C	2,257,953	18.05
WAN T3 ATM	50 and higher	D	275,819	2.21

(* Note: The version of the D&B file analyzed here is May, 2001.)

Broadband Potential Data Fields

A listing of the new supplemental Broadband Potential Scores and related fields is shown below.

Start Position	End Position	Field Length	Field Format	D&B Field Name	Field Description
0001	0009	009	A9	DUNS_NMBR	D-U-N-S NUMBER A randomly generated nine-digit number assigned by Dun & Bradstreet to identify unique business establishments.
0010	0015	006	N4.1	CBBP_SCORE	CONSOLIDATED BROADBAND POTENTIAL SCORE Score is a decimal numeric field ranging between 0.0 to 9999.9, and is proportional to the bandwidth requirements of the given location, plus all of the bandwidth contributions of all subsidiary establishments that answer to this firm. Correspondence of likely applicable Data Services to the Consolidated Broadband Potential Score is as follows (note that ranges are not necessarily exclusive): >=0 to <2 = No Broadband Data Services >=2 to <5 = xDSL or ISDN (BRI) >=5 to <50 = ISDN (PRI) / T1 / Frame Relay 50 and higher = WAN / T3 / ATM
0016	0021	006	N4.1	SBBP_SCORE	SITE BROADBAND POTENTIAL SCORE Score is a decimal numeric field ranging between 0.0 to 9999.9, and is proportional to the bandwidth requirements of the given location only, and does NOT consider any bandwidth contributions of any subsidiary establishments that answer to this firm.
0022	0022	001	N1	DSR_A	DATA SERVICES RANGE "A" FLAG ("0" = "No", or "1" = "Yes") Flags if the firm has a CBBP score equating to likely "No Broadband Data Services" at this location.
0023	0023	001	N1	DSR_B	DATA SERVICES RANGE "B" FLAG ("0" = "No", or "1" = "Yes") Flags if the firm has a CBBP score equating to likely "xDSL or ISDN (BRI)" data services.
0024	0024	001	N1	DSR_C	DATA SERVICES RANGE "C" FLAG ("0" = "No", or "1" = "Yes") Flags if the firm has a CBBP score equating to likely "ISDN (PRI), T1, or Frame Relay" data services.
0025	0025	001	N1	DSR_D	DATA SERVICES RANGE "D" FLAG ("0" = "No", or "1" = "Yes") Flags if the firm has a CBBP score equating to likely "WAN, T3, or ATM" data services.